

Name

Answer Key

Date

Bell

Unit 1 Test Review:

All work must be shown.

Simplify.

1. $[7(-2) + (-4)] + [9 - 8(-4)]$

$$[-14 + (-4)] + [9 + 32]$$

$$-18 + 41 = 23$$

2. $-6 \cdot 2 \cdot -5 \cdot -2$

$$-12 \cdot -5 \cdot -2$$

$$60 \cdot -2$$

$$-120$$

Write the correct answer choice in the blank provided.A3. What is 5 less than 8 times a number x ?

A. $8x - 5$

B. $8x$

C. $5x - 8$

D. $5 - 8x$

A

4. Which expression is simplified?

A. $6x^2 - 2x + 3$

B. $6x^2 + 2x - 7x$

C. $6x + 2x$

D. $8 + 6x - 3$

B5. Simplify the expression: $(-p - 3) + 8p$.

A. $9p + 3$

B. $7p - 3$

C. $-8p + 3$

D. $8p - 3$

C6. The number of school days in a year *best* represents which real number set?

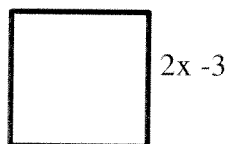
A. Irrational

B. Integers

C. Natural

D. Whole

7. Find the perimeter of the square. Express your answer in simplest form.



$$4(2x - 3) \text{ OR } 2x - 3 + 2x - 3 + 2x - 3 + 2x - 3$$

$$8x - 12$$

Evaluate.

9.

$$\frac{9 \cdot 4}{3(4 + 2)}$$

$$\frac{36}{18} = 2$$

10.

$$3 \cdot \{-21 \div [3 - (4 - 8)]\}$$

$$3 \cdot \{-21 \div [3 - (-4)]\}$$

$$3 \cdot \{-21 \div (7)\}$$

$$3 \cdot (-3)$$

$$-9$$

Match the property with the equation:C

11. $5 + (-5) = 0$

B

12. $8 + 0 = 8$

A

13. $9(1 + a) = 9(1) + 9(a)$

E

14. $0 \cdot 6 = 0$

F

15. $1(48) = 48$

G

16. $3 \cdot \frac{1}{3} = 1$

D

17. $4 + 9 = 9 + 4$

A. Distributive Property

B. Additive Identity

C. Additive Inverse

D. Commutative Property of Addition

E. Multiplicative Property of Zero

F. Multiplicative Identity

G. Multiplicative Inverse

18. Which step is incorrect? Explain and correct the error.

Simplify: $[7(2)^2 - 2] \div [10 + 15(2)^3]$

Step 1: $[7(4) - 2] \div [10 + 15(8)]$

Step 2: $[28 - 2] \div [10 + 120]$

Step 3: $26 \div 130$

Step 4: 5

Step 4 is incorrect because $26 \div 130$
is $\frac{1}{5}$ not 5.

Evaluate each expression for the given values if $a = 6$, $b = -4$, and $c = 2$.

19. $4b - 2c + 3a$

$4(-4) - 2(2) + 3(6)$
 $-16 - 4 + 18$
 $-20 + 18 = (-2)$

20. $2a - 8 - b^3$

$2(6) - 8 - (-4)^3$
 $12 - 8 - (-64)$
 $12 - 8 + 64$
 $4 + 64 = (68)$

Simplify the expression.

21. $-(t-6)$
 $-t + 6$

22. $(4x - 3x^2 + 9x + 4x^2 - 6x)$
 $x^2 + 7x$

23. $-3(x-5) + 7(x-5)$
 $(-3x + 15) + (7x - 35)$
 $4x - 20$

Place a check mark in each box to identify the set(s) of numbers to which each number belongs.

Irrational (I), Rational (Q), Integer (Z), Whole (W), Natural (N)

		I	Q	Z	W	N
24.	$\frac{2}{3}$		✓			
25.	97		✓	✓	✓	✓
26.	2π	✓				
27.	0.56		✓			
28.	$\sqrt{361} = 19$		✓	✓	✓	✓

Write an expression or equation for the situation.

29. 12 more than the quotient of -3 and x .

29. $-\frac{3}{x} + 12$ or $12 + \frac{-3}{x}$

30. 14 diminished by a number (n).

30. $14 - n$

31. You are selling lemonade (l) and cookies (c) to raise money. You price the lemonade at \$0.75 per glass and cookies at \$1.50 each. Write an expression for the total amount of money raised (in dollars) from selling both lemonade (l) and cookies (c).

31. $.75l + 1.50c$
 Lemonade + cookies